OBSTETRICS.

UNDER THE CHARGE OF

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A CASE OF AIR-EMBOLUS IN PLACENTA PRÆVIA.

HEUCK (*Zeitschrift für Geburtshülfe und Gynäkologie*, Bd. xxviii., H. 1) describes a case of air-embolus with fatal termination in a case of placenta prævia. The patient was admitted in labor, and the diagnosis of placenta prævia established. Under narcosis version was attempted, and a foot seized and brought down to the vulva. As soon as this occurred the woman had a violent pain and bore down hard; at the same time a thick stream of bloody water spurted from the vagina. She was brought lengthwise to the bed, when suddenly the pulse became imperceptible and the face slightly cyanotic. Breathing persisted, but less frequently than normal. Injections of camphorated ether were given, the chin depressed, and artificial respiration practised, but all in vain. The respiration became less and less frequent, marked cyanosis ensued, and death followed in about five minutes. At the autopsy, two hours post-mortem, on section of the right jugular vein, an air-bubble as large as a hazel-nut escaped. The great vessels of the heart were tied. The heart gave a tympanitic note, and on lifting it up one could see clearly through the thin walls of the right ventricle air-bubbles rising from deep within the heart. The right heart was opened under water, when air-bubbles escaped from it. The coronary arteries contained no air, and the heart's musculature and valves were normal. Lungs and pleuræ were sound. Air-bubbles were also found in the right spermatic (ovarian) vein. The unopened uterus was placed in alcohol and opened some weeks later. It contained a placenta prævia centralis, the principal part attached to the right and posterior wall. It was partially detached on the right side, but no large vessel-lumina were observed. The author concludes that it is improbable under the manipulations of version that air was pressed into the veins, but believes that this took place immediately after the version was complete. At the moment when the foot hung from the vagina a violent pain and gush of bloody water occurred, and *immediately* the radial pulse failed, while respiration persisted. It is believed that at this moment the air between the uterine wall and the detached surface of the placenta was pressed into the gaping lumina of the veins. Further, this air was, by the sudden lowering of abdominal pressure due to cessation of pain and bearing down, aspirated into the spermatic (ovarian) vein, and thence into the vena cava and right heart. Three cases in the last six years occurring in this clinic (Universitäts Frauenklinik, Berlin) show that this accident is not so rare as many imagine.

THE HISTOLOGY OF THE HUMAN AMNION AND UMBILICAL CORD.

LANGE (*Zeitschr. für Gebürtshulfe und Gynäkologie*, Bd. xxviii., H. 1) presents a contribution to the histological anatomy of the amnion and umbilical cord in the human embryo. His conclusions are as follows:

1. The epithelium of the amnion is not cubical or cylindrical, but a single layer of pavement epithelium.
2. The granulation of the dead amniotic epithelium does not depend on the presence of fat.
3. In the amniotic epithelium there are no open mouths of lymph passages. The pretended stomata are artificial, and arise through the rupture of degenerated mucous cells.
4. The umbilical epithelium is, as a rule, a three-, seldom four- or five-layered laminated epithelium, whose deep layer consists only of flat cells.
5. During embryonic life the differentiation into a laminated epithelium appears on the umbilical cord earlier than the division of the epithelium.
6. "Stomata" are not found in the epithelium of the umbilical cord.
7. The umbilical cord of a mature fœtus contains numerous elastic fibres within the connective tissue.
8. The cord contains no other lymph channels than the connective-tissue corpuscles of Virchow.
9. These capillary lymph channels are most probably susceptible of injection.
10. Between the epithelial cells of the cord can be found no branches of lymph channels.

ANATOMY AND PHYSIOLOGY OF THE CIRCULATION OF THE NEWBORN.

STRASSMANN (*Archiv für Gynäkologie*, Bd. xlv., H. 3) gives the results of his investigations concerning the anatomy and physiology of the circulation in the newborn. Briefly these may be tabulated as follows:

1. The explanations heretofore accepted as to the cause of the closure of the ductus arteriosus are not satisfactory:
   - *a.* Thrombosis is seldom found, and is pathological.
   - *b.* Self-closure by contraction of the duct is not demonstrated.
   - *c.* Changes of position of the thoracic organs with bending of the duct after inspiration has no anatomical basis.
   - *d.* The post-partum changes in the duct walls are neither peculiar nor characteristic, as they also occur in the umbilical vessels.
   - *e.* The impulses mentioned in *b* and *d* favor the definitive obliteration of the duct.
2. The closure of the duct comes instantly and mechanically.
3. The manner of entrance of the duct into the aorta makes possible such mechanical closure.
4. From the fifth month in the human fœtus a progressive development of